

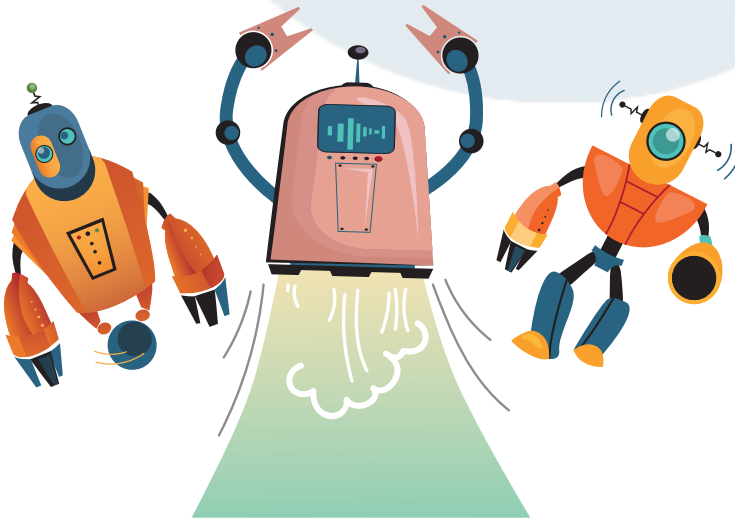
PONY

ICT

Monthly Revision of
February and March

By

Suzy Atef



Second Term

Lesson 1 Artificial Intelligence and Ethics of Its Use

» Artificial Intelligence (AI):

It is a technology that enables machines to use **human-like traits**, such as logic, to solve problems.

» Artificial Intelligence depends on **algorithms**, which are a set of detailed steps that tells the computer what to do, like **recipes** that help machines learn and solve problems.

» Some Artificial Intelligence Tools:

- ❶ **Facial Recognition**: used to verify identity and unlock phone. Ex; **Smartphones**.
- ❷ **Voice Assistants**: Digital robots which respond to voice commands and answer questions. Ex; **Siri or Alexa**.
- ❸ **Email Filters**: prevent dangerous or unwanted or malicious mail from reaching your inbox. Ex; **Email inbox**.
- ❹ **Language Processing Tools**: help users formulate writings write and send emails and messages. Ex: **Search tools and electronic writing tools**.
- ❺ **Chat Windows**: automatically respond to you using chatbots. Ex; Customer service on websites.

» Using Artificial Intelligence Responsibly and Ethically:

- ❶ **Inclusiveness**: AI tools must benefit and include all users not only a specific group.
- ❷ **Unbiased**: AI decisions must be based on facts, not opinions or personal views.
- ❸ **Protectiveness (Privacy)**: The privacy and security of users' data must be considered.

- ④ **Benefit:** AI tools should be used to help society and make it better, not to achieve harmful personal gains or cheating others.
- ⑤ **Responsibility:** Designers should admit and correct mistakes made by AI tools.
- ⑥ **Transparency:** AI designers clearly explain how AI tools work.

Lesson 2 Online Shopping and Investment: How Do We Choose the Best?

» E-commerce:

It is the process of buying and selling products and services online.

» Research Tools:

① Smart Search Engines:

When searching for a specific product online, search engines use **artificial intelligence** to analyze your previous data, to provide: Suggestions that **match** your preferences and results of the **most suitable** products or the **fastest** delivery.

② Comparison Websites:

Help you when buying products by: Comparing many products in one place, and Evaluating **quality**, **price**, and **features**.

③ Online Reviews:

Reviews help you evaluate the quality of the product and service before purchasing.

» Consumer reviews:

- opinions of users, friends, or family online.

» Stocks and Bonds:

- **Stocks (Shares):** Equal parts into which the ownership of a company is divided.
- When you buy **stocks** in a company, you become a **partner** owning a small part of that company.
- When you buy **bonds**, you **lend** the company a sum of money.

- » We invest in stocks and bonds, To support companies that offer something good, or To make profit (Investors earn money from the profits or interest).
- » It is important to invest in companies that follow ethical principles.
- » To ensure this, we should review the official companies websites and reviews from reliable sources.

Lesson 3 Digital Communication

» 1 Educational Service Providers (ESPs):

- They are organizations that provide educational services for students and teachers,
- They can provide: Books and Online training materials.

Examples: Online libraries such as: Alexandrina library & EKB

» 2 Customer Support Services: سلسلة كتب الـ

- They are the services provided by companies to help you solve problems or answer your inquiries.

» Contacting Services Providers:

1 Email:

- **Email:** is a **formal** and **professional** way of communication
- It is the best choice when your problem needs a detailed explanation or when you need an official document

» Important Tips for Writing a Good Email:

1 **Clear Subject:** Write a **clear** and **short** subject

2 **Respect:** Start with a formal and respectful **greeting** and finish it with your **signature**.

3 **Stating the Purpose:** Clearly state why you are contacting and information you need.

2 Chatbot Windows (Chatbots):

- **Chatbots:** they are AI computer programs; designed to respond to questions online.

» Advantages of chatbots:

- 1 **Speed:**
 - They give quick responses.
 - The service provider replies within 24 hours, if a real person is needed.
- 2 **Accuracy:**
 - You should write your question clearly and accurately.
 - If your questions are not clear, you will not receive accurate answers.

» Other Ways of Communication:

- 1 **Telephone:** Speak directly with a support employee.
- 2 **Visiting support offices:** Go to the organization's office to submit your request.

Lesson 4 Video Conferences

» Video conferences:

- They are tools that allow people in different places to communicate with each other using audio and video in real time, via the Internet, using **cloud computing**.

» Video Conferencing Tools:

- 1 Microsoft Teams
- 2 Google Meet
- 3 Zoom

» Steps for Using Video Conferences:

- 1 **To create a Meet:**
 - Click on **New Meeting**.
 - **Then click on the option:** Start a meeting instantly, or to create a meeting for **later**.
 - Once you have created your meeting, **copy** the meeting link that Google provides.
 - **Share** it with the meeting participants.
- 2 **To join a Meet,** there are two ways you can join a meeting:
 - Click **the link** that was sent to you. **Or**
 - Copy the meeting **code** or **link**, paste it in the right place, then click the **"Join"** button.

» Rules of video conference:

1 Before the Conference:

- **Check the Technology:** Make sure the **Internet**, **camera**, and **microphone** are working properly, to avoid technical problems during the meeting.

2 During the Conference:

- **Manage Audio and Video:**
 - 1 Click the **microphone** icon to mute or unmute.
 - 2 Click the **camera** icon to turn the video on or off.
- **Be calm and respectful:**
 - 1 Make sure that your **behavior** is appropriate for the meeting.
 - 2 Monitor your notes on the screen.

3 After the Conference:

- You can send a follow-up email.
- Attach the recording to your email, if the meeting was recorded.

Lesson 5 Programming Languages and Digital Problems Solving

» Computers don't understand human language, so we use special languages to communicate with them (**programming languages**).

» Programming languages:

They are a set of rules and symbols that we use to give clear instructions to computer programs.

» The Most Popular Languages on the Web

1 Hyper Text Markup Language (HTML):

- HTML is used to build the **structure** of web pages
- It give the web page its shape.



2 JavaScript:

- JavaScript is used to create **interactive** and **dynamic** web pages, such as moving buttons or pop-up windows.
- It adds "**life**" to the page.



Common Digital Problems and solution

The Problem	Suggested Solutions (Steps)
❶ Corrupted File	❶ Make sure the file represents what you expect. ❷ Try opening it using a different program. ❸ If you are sure the file is corrupted, delete it.
❷ The Device Does Not Charge	❶ Make sure the charging cable is working properly. ❷ Make sure that the power socket or power adapter is working. ❸ If the battery is the problem; you may need to replace it.
❸ Forgetting the Password	❶ Click on the "Forgot Password" link. ❷ Follow the steps to create a strong password.
❹ Ways to Save Files	• Make a backup of your files on : ❶ external drive ❷ a cloud storage like Google Drive or OneDrive.
❺ Undeletable file	• Check if the file name contains special symbols that prevent it from being deleted.

Lesson 6 Image Editing

» Image editing:

- It is the changing and modifying images to make them look better or more attractive.

» It may be to fix mistake in an image or to make it look professional for presentation.

» Image Editing Programs:

- such as GIMP which is abbreviation for GNU Image Manipulation Program.



»» Features of GIMP

- It is **powerful** program.
- It is a **free** program.
- It is **open-source** program that anyone can use and modify its tools.
- You can download it directly from the Internet.

»» Image editing allows us to:

1 Correct flaws:

- Restore original colors of an image or remove excessive camera light.

2 Change Colors:

- Change the background color of an image or a video.
- EX; Make the color of a video frame smoother.

3 Merge Images (blending):

- Combine two different images to become one image (useful in creating presentations).

4 Special Effects (Filters):

- Use filters to make the image **look old** or to add special effects such as **3D**.

»» Modern image editing programs like GIMP use artificial intelligence.

- **Color Adjustment:** AI learns how to adjust the colors of an image so that only the colors you need appear.

February and March Model Exams

Model Exam

1

1 Choose the correct answer:

- 1 What part of the email should you specify the purpose of your message from the beginning?
 - a. Signature of the letter
 - b. Greeting
 - c. Content of the message
 - d. Subject of the message
- 2 GIMP is an abbreviation for Image Manipulation Program.
 - a. General
 - b. GNU
 - c. Global
 - d. Google
- 3 Email is a way of communication.
 - a. Informal
 - b. Random
 - c. Formal / professional
 - d. Personal only
- 4 Which artificial intelligence tool is used to protect your email from malicious messages?
 - a. Voice assistants
 - b. Smart home devices
 - c. Smart navigation systems
 - d. Email filters
- 5 When joining an online meeting, but you don't have the link, which of the following do you need?
 - a. Your email address
 - b. Meeting code
 - c. Username
 - d. Phone number
- 6 Through image editing, you can restore of an image.
 - a. original colors
 - b. the name
 - c. the date
 - d. the location
- 7 When you buy a company's share, you become in that company.
 - a. A lender
 - b. A consumer
 - c. An employee
 - d. A partner

2 Put (✓) or (X):

- 1 E-commerce is the process by which goods and services are bought and sold online. ()
- 2 Social media messages are always the best way to deliver accurate and professional information. ()
- 3 To create a new meeting, you need to click on the "New Meeting" option. ()
- 4 Language processing tools help in drafting writing and emails. ()
- 5 If there is a flaw in an image because of too much light from the camera, photo editing can correct it. ()
- 6 GIMP is a closed-source program that no one can modify. ()
- 7 HTML programming language creates the page structure, and JavaScript adds interactivity and animation to it. ()
- 8 Responsibility is the ethical principle that relates to ensuring that society benefits from artificial intelligence. ()

Model Exam

2

1 Choose the correct answer:

- 1 Motion blur is an example of
 a. LAN
 b. merging
 c. correcting flaws
 d. special effects
- 2 What is the name of the tool used to add special effects to images in photo editing programs?
 a. Colors
 b. Filters
 c. Attachments
 d. Shapes
- 3 If artificial intelligence is collecting your personal information, the principle must be applied Library catalogue
 a. Transparency
 b. Inclusivity
 c. Confidentiality (Privacy)
 d. Accuracy

- 4 What is the necessary procedure that must be done before joining the conference to avoid technical problems?
 - a. Eat breakfast
 - b. Write a long letter.
 - c. Check your internet connection and ensure your camera and microphone are working
 - d. Update your operating system
- 5 What is the process of buying and selling goods and services online?
 - a. E-commerce
 - b. Digital investment
 - c. Traditional marketing
 - d. Cloud comparison
- 6 Mention one advantage of chat windows compared to email.
 - a. more formal
 - b. Instant response
 - c. Suitable for explaining long problems
 - d. Difficult to use
- 7 After the meeting, you can send a to the participants.
 - a. meeting code
 - b. follow-up email
 - c. new link
 - d. camera icon

2 Put (✓) or (X):

- 1 Smart search engines are among the most important artificial intelligence tools that help users on the internet. ()
- 2 Instant chat is the process that enables you to obtain a copy of the meeting after it has ended. ()
- 3 The best way to communicate if you need a detailed and professional explanation of a problem is via email. ()
- 4 Microsoft Word is the popular program used as an alternative of GIMP. ()
- 5 Image editing makes images look professional for presentations. ()

- # Model Exam

3

2 Put (✓) or (X):

Model Exam

4

1 Choose the correct answer:

- 1 What do smart search engines use to rank the results that suit you?
 - a. Store names
 - b. Product colors
 - c. Advertisement images
 - d. Your browsing preferences and past behavior
- 2 In your opinion, why should passwords be strong and unique?
 - a. To protect the account from hacking
 - b. To make it easy to remember
 - c. To keep it short
 - d. To make it easier to share with others
- 3 If you want to make your image look old or have motion blur, what can you use?
 - a. Text editing
 - b. Color organization
 - c. Special effects (Filters)
 - d. Background correction
- 4 If artificial intelligence collects your personal information, it must apply the principle of
 - a. Inclusiveness
 - b. Transparency
 - c. Accuracy
 - d. Privacy
- 5 A person who buys goods and services is called
 - a. Designer
 - b. Programmer
 - c. Consumer
 - d. none of them
- 6 Which programming language is used to create the basic structure of web pages?
 - a. JavaScript
 - b. Paint
 - c. HTML
 - d. None of them
- 7 Modern image editing programs use to help users.
 - a. Artificial Intelligence
 - b. manual tools only
 - c. Wi-Fi
 - d. IoT



2 Put (✓) or (X):

- 1 The principle of transparency requires that the tool's designer be prepared to explain how it works. ()
- 2 Online consumer reviews are a helpful tool for evaluating product quality before purchase. ()
- 3 The function of online comparison sites is to remove unwanted products. ()
- 4 The email sent after the conference is called a follow-up email. ()
- 5 JavaScript language is used to create static web pages only. ()
- 6 Inappropriate behavior during a video conference is unacceptable and should be avoided. ()
- 7 Two images can be merged into one through photo editing. ()
- 8 You have to pay money to use GIMP. ()

Model Exam

5

1 Choose the correct answer:

- 1 What is AI-powered chat programs on websites called?
 - a. Voice assistants
 - b. Navigation applications
 - c. Email
 - d. Chatbots
- 2 Which of the following is a flaw in an image and can be fixed by editing?
 - a. excessive camera light
 - b. Slow Internet
 - c. Video volume is low
 - d. Difficulty in typing
- 3 What is the best option to protect files from permanent loss?
 - a. Save the file to the Recycle Bin
 - b. Save it to your desktop.
 - c. Save it to a USB drive
 - d. Save it to cloud storage
- 4 What are the steps or recipes that artificial intelligence relies on to learn and solve problems called?
 - a. Hypotheses
 - b. Algorithms
 - c. Records
 - d. Statistical models

- 5 What gives you a part of ownership in a company?
 - a. Bonds
 - b. Sukuk
 - c. Shares
 - d. Coupons
- 6 What is the name of the process that makes two different images appear as one image in a presentation?
 - a. Color correction
 - b. Changing the background
 - c. merging images
 - d. Cropping the image
- 7 What is a file called when it does not work properly?
 - a. Normal file
 - b. Corrupted file
 - c. Saved file
 - d. Temporary file

2 Put (✓) or (X):

- 1 What an investor should consider when choosing companies to support the environment is that the company is environmentally friendly and follows ethical standards. ()
- 2 Email is a random means of communication. ()
- 3 Video conferencing allows for direct written communication. ()
- 4 If the message "File is corrupt" appears, this means that the keyboard is not working. ()
- 5 To make an image look like it is moving or has motion blur, we use special effects (filters). ()
- 6 It is ethical to deliberately omit data from a specific group of people when training artificial intelligence tools. ()
- 7 When attempting to delete a file that cannot be deleted, check if it contains any special characters. ()
- 8 Artificial intelligence is the technology that enables machines to use human traits in problem-solving. ()

Answers

MODEL (1)

1 1 d 2 b 3 c 4 d 5 b
6 a 7 d

2 1 ✓ 2 X 3 ✓ 4 ✓ 5 ✓
6 X 7 ✓ 8 X

MODEL (2)

1 1 d 2 b 3 c 4 c 5 a
6 b 7 b

2 1 ✓ 2 X 3 ✓ 4 X 5 ✓
6 ✓ 7 X 8 ✓

MODEL (3)

1 1 b 2 d 3 c 4 b 5 c
6 a 7 b

2 1 X 2 ✓ 3 X 4 ✓ 5 X
6 ✓ 7 X 8 ✓

MODEL (4)

1 1 d 2 a 3 c 4 d 5 c
6 c 7 a

2 1 ✓ 2 ✓ 3 X 4 ✓ 5 X
6 ✓ 7 ✓ 8 X

MODEL (5)

1 1 d 2 a 3 d 4 b 5 c
6 c 7 b

2 1 ✓ 2 X 3 ✓ 4 X 5 ✓
6 X 7 ✓ 8 ✓